

STRUCTURE OF A TWIN DISC TYPE TOOL TURRET MECHANISM FOR CNC MACHINES

ABSTRACT

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A tool turret mechanism includes internal and external tool turrets, a toothed ring secured to the internal tool turret, a central shaft secured to the external turret, a power switch, and a clutch; the central shaft has a piston fitted thereto; the power switch is used for providing power to the internal and the external turrets through the toothed ring and the shaft respectively; the clutch includes a fixed clutch claw, external and internal ring clutch claws, which are respectively securely connected to inner edge of the internal turret, and inner edge of the external turret; the ring clutch claws will rotate, and engage each other; when the piston is actuated, and displaced, the external turret will be forced to change position, and both the turrets will be left and right displaced between a first position, in which they engage the clutch, and a second position, in which they disengage the clutch.

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